Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A therapeutic composition useful for treatment of a mucositis at a mucosal site, the composition comprising:

at least one pharmaceutical substance selected from the group consisting of glutathione, a precursor for glutathione biosynthesis and combinations thereof, effective to provide therapeutic effect for at least one of the prevention of the mucositis and treatment of the mucositis;

at least one biocompatible polymer that is different than the pharmaceutical substance;

a carrier liquid interacting with the biocompatible polymer to impart reverse-thermal viscosity behavior to the therapeutic composition, wherein the composition exhibits the reverse-thermal viscosity behavior over at least some range of temperatures between 1°C and 37°C.

Claims 2-3. (Cancelled)

4. (Original) The therapeutic composition of Claim 1, wherein the pharmaceutical substance is selected from the group consisting of an antibacterial, an anti-inflammatory, an antioxidant, an anesthetic, an analgesic, a protein, a peptide and a cytokine.

5. (Original) The therapeutic composition of Claim 1, wherein the pharmaceutical substance comprises a thiol-containing compound.

6. (Original) The therapeutic composition of Claim 5, wherein the thiol-containing compound is selected from the group consisting of N-acetylcysteine, and glutathione.

7. (Original) The therapeutic composition of Claim 1, wherein the pharmaceutical substance comprises a sulfur-containing antioxidant.

8. (Previously Presented) The therapeutic composition of Claim 7, wherein the sulfur-containing antioxidant is selected from the group consisting of S-carboxymethylcysteine, procysteine, lipoic acid, s-allyl cysteine, and methylmethionine sulfonium chloride.

9. (Original) The therapeutic composition of Claim 7, wherein the sulfur-containing antioxidant includes sulfur in at least one functional group selected from the group consisting of thiol, thioether, thioester, thiourea, thiocarbamate, disulfide, and sulfonium salt.

10. (Original) The therapeutic composition of Claim 1, wherein the pharmaceutical substance comprises a precursor for glutathione biosynthesis.

11. (Previously Presented) The therapeutic composition of Claim 10, wherein the precursor is selected from the group consisting of N-acetylcysteine, procysteine, lipoic acid, s-allyl cysteine, S-carboxymethylcysteine,and methylmethionine sulfonium chloride.

12. (Original) The therapeutic composition of Claim 1, wherein the pharmaceutical substance is N-acetylcysteine.

Claims 13-14. (Cancelled)

15. (Original) The therapeutic composition of Claim 1, wherein the pharmaceutical substance comprises from about 0.001 percent by weight to about 50 percent by weight of the composition.

16. (Cancelled)

17. (Original) The therapeutic composition of Claim 1, wherein the therapeutic composition exhibits reverse-thermal viscosity behavior over at least some range of temperature between 1°C to 20°C.

18. (Original) The therapeutic composition of Claim 1, wherein the biocompatible polymer is a reverse-thermal gelation polymer.

19. (Original) The therapeutic composition of Claim 18, wherein the biocompatible polymer, as formulated in the therapeutic composition, has a reverse-thermal liquid-gel transition temperature within a range of from 1°C to 37°C, so that the therapeutic composition gels as the temperature of the therapeutic composition is increased from below to above the reverse-thermal gel transition temperature.

20. (Original) The therapeutic composition of Claim 18, wherein the biocompatible polymer, as formulated in the composition, does not impart reverse-thermal gelation properties to the composition.

21. (Original) The therapeutic composition of Claim 18, wherein the biocompatible polymer is a polyoxyalkylene block copolymer.

22. (Original) The therapeutic composition of Claim 18, wherein the biocompatible polymer comprises from 5 weight percent to 25 weight percent of the composition.

23. (Original) The therapeutic composition of Claim 1, wherein the biocompatible polymer comprises from 1 weight percent to 70 weight percent of the composition.

24. (Previously Presented) The therapeutic composition of Claim 1, wherein the biocompatible polymer is dissolved in the carrier liquid when the composition is at a temperature of 5°C.

25. (Previously Presented) The therapeutic composition of Claim 24, wherein the pharmaceutical substance is dissolved in the carrier liquid when the composition is at a temperature of 5°C.

Claims 26-30. (Cancelled)

31. (Original) The therapeutic composition of Claim 1, comprising a bioadhesive agent that is different than the pharmaceutical substance and the biocompatible polymer.

Claims 32-34. (Cancelled)

35. (Original) The therapeutic composition of Claim 1, comprising at least one taste masking component.

Claims 36-37. (Cancelled)

38. (Original) The therapeutic composition of Claim 1, comprising at least one

preservative component.

Claims 39-40. (Cancelled)

41. (Original) The therapeutic composition of Claim 1, wherein the therapeutic composition is in the form selected from the group consisting of an oral solution, a bladder irrigation solution, a mouthwash, a gel, drops, a spray, a suppository, a slurry, a tablet, a lozenge, a patch, a film and a lollipop design.

Claims 42-132. (Cancelled)

133. (New) The therapeutic composition of Claim 1, wherein the therapeutic composition exhibits an increase in viscosity from no larger than about 60cP to at least about 70cP when a temperature of the composition is increased over the range of temperatures.

134. (New) The therapeutic composition of Claim 1, wherein the therapeutic composition exhibits an increase in viscosity from no larger than about 60cP to at least about 80cP when a temperature of the composition is increased over the range of temperatures.

135. (New) The therapeutic composition of Claim 1, wherein the therapeutic composition exhibits an increase in viscosity from no larger than about 50cP to at least about 70cP when a temperature of the composition is increased over the range of temperatures.

136. (New) The therapeutic composition of Claim 1, wherein the composition comprises reverse-thermal gelation properties with a reverse-thermal liquid-gel transition temperature within the range of temperatures.

137. (New) The therapeutic composition of Claim 1, wherein the therapeutic composition comprises from 0.1 to 20 weight percent of the pharmaceutical substance and from 5 to 20 weight percent of the biocompatible polymer.

138. (Currently Amended) The therapeutic composition of Claim 137, wherein the biocompatible polymer is a polyoxyalkylene block copolymer comprising at least a block of a first polyoxyalkylene and a block of a second polyoxyalkylene; and

the first polyoxyalkylene is a polyoxyethylene and the second polyoxyalkylene is a polyoxypropylene.

139. (New) The therapeutic composition of Claim 138, wherein the biocompatible polymer comprises two of the block of the first polyoxyalkylene and one of the block of the second polyoxyalkylene.

140. (New) The method of Claim 137, wherein the therapeutic composition comprises up to 10 weight percent of the pharmaceutical substance.

141. (New) The method of Claim 137, wherein the pharmaceutical substance is N-acetylcysteine.